



## Critical Care to Hospital Discharge: Bariatric Equipment Supports Early Mobilisation Post Emergency Surgery

- ↑ Easy upright positioning without abdominal crunching
- ↓ Reduced moving and handling risks for staff
- ↓ Number of staff required to turn patient reduced by 50%

### Introduction

Frank\* (age 67) was admitted to hospital with a strangulated abdominal hernia requiring emergency surgery. He was admitted to critical care following surgery as he became haemodynamically very unstable. He weighed 125kg and had the following comorbidities:

- **Hypercholesterolaemia**
- **Atrial fibrillation**
- **Rheumatoid arthritis**

Prior to becoming unwell, Frank was mobile with the aid of a walking stick and self-caring.

On admission, Frank's skin was in good condition and intact. In critical care he was initially nursed on a standard width bed and alternating pressure mattress. His skin was vulnerable as he wasn't able to move himself, so was completely reliant on caregivers for positional changes.

*\*Frank is not the patient's real name*

### Clinical Challenges

In critical care, once Frank had stabilised and become more alert, he became agitated. The staff realised this was because the bed was too narrow for him. He was trying to move and turn but was unable to. This was a big risk for him as he still had a central line in-situ, and he could have damaged the surgery site.

Critical Care called Medstrom's Clinical Advisor to assess Frank for more suitable equipment. **She commented:**

"It was clear, as the staff had already told me, that Frank **needed a wider bed**. He was in **danger of injuring himself** and the staff were struggling to reposition him. I recommended equipment that would help **resolve these problems** and got it **installed on the same day**. As it was hoped that Frank would soon move out of Critical Care to a ward, I selected a bed that he would be able to start mobilising from once he was ready, for **continuity and ease of use**."



## Patient Objectives

- Patient comfort and ease of movement
- In-bed and subsequently from/to bed mobilisation
- Easier lateral movement for improved care

## Introduction of Medstrom's Bariatric Equipment Package

A bariatric bed and surface were provided which would allow early, easier mobilisation and help to maintain skin integrity:

**MMO 8000 Bed:** This bed has a platform width of 110cm (compared to approximately 90cm for a standard bed). This gave sufficient width for Frank to move safely and comfortably and reduced moving and handling risks for caregivers, giving them better access and more room to help Frank move.

The bed's ultra-low height of 21cm allows over 99% of the UK male population to mobilise safely, The customisable optimum egress height allowed safe mobilisation to and from the bed at Frank's popliteal height<sup>1</sup> every time he got out of bed, once he was well enough.

The high height of the platform (83cm) provides a safe height for 98% of UK adults to work from without twisting or stooping, reducing manual handling risks.

The elliptical backrest movement on the bed mimics spine elongation when a person moves from lying to sitting. This reduces abdominal crunching, which was particularly important for Frank due to his abdominal surgical wound.

**TurnCair 1000 Low Air Loss Surface:** This provides a high specification of support surface for pressure redistribution, plus a TurnAssist feature that enables safe and dignified handling of patients and aids respiratory management.

Frank also had his own walking stick which was brought in from home. With the extra width provided by the bed, in-bed mobilisation became instantly easier, and Frank settled down. As he got better, he was able to move himself using the bed controls, giving him more independence.

The TurnCair 1000 surface was very well received by the nursing staff. They found it much easier to turn Frank and to provide personal care. The number of staff required to turn Frank was reduced by 50% from four to two. They said it felt a lot safer for them and that it reduced moving and handling risks.

Frank moved from Critical Care to a ward to continue his recovery. He remained on the TurnCair 1000 surface until discharge as he liked the turning feature, especially at night; it meant his sleep was less disturbed. He started mobilising from the bed after he moved to the ward, and by discharge was almost back to pre-admission mobility, barring some abdominal discomfort and stiffness which he was still experiencing as his wound was healing.



All objectives for Frank had been met; he was recovering well from surgery and the bed and surface provided a wide enough, comfortable combination which also reduced the number of staff required to turn him and reduced manual handling risks.



**Complications prevented**



**Skin intact**



**Early mobilisation**

## Summary

Both the bed and surface played key parts, separately and together, in helping Frank recover. In Critical Care, the bed provided a safe height for the staff to work at and allowed safer in-bed mobilisation of Frank. On the ward, the bed allowed safe, early egress and mobilisation. The surface provided a safer, easier, and more dignified solution to help Frank change position, whilst requiring less staff and reducing manual handling risks; the staff benefits also give an economic benefit of reduced costs.

Shortly before discharge, **Frank commented to Medstrom's Clinical Advisor:**

**"I felt much better** as soon as I was moved from the old be to this one. I like the mattress – **it's comfortable** and I've got so used to it now, **I hardly feel the turn**. It's helped me **sleep better** as I don't need to keep calling the nurses to help me."



**Well-being**



**Comfort**



**Better sleep**

**To discover more about Medstrom's range of solutions for dignified plus-size patient care and enhanced support for caregivers, contact Medstrom's Bariatric Product Specialists 24/7/365 on:**

**UK: 0845 371 1717 or [info@medstrom.co.uk](mailto:info@medstrom.co.uk) IRE: 01 686 9487 or [info@medstrom.ie](mailto:info@medstrom.ie)**

## References:

1. Martindale D (2021). Calculating bed height for hospital patients using popliteal measurement. Nursing Times [online]; 117:10